

R E M A R K S

Reconsideration and reexamination of the above-identified application are hereby requested. By this Amendment, a grammatical correction has been made to claim 22. Claim 33 has been canceled. Several new claims, allowable over the cited prior art have been added. For the following reasons, the pending claims are not anticipated by Wissenbach et al.

A device which embodies the claimed invention does not receive signals from a fluid flow sensor. Rather, a user enters an expected or estimated flow rate for a given pump. When the pump is actuated during one or more time intervals, the estimated flow rate is combined with the one or more time intervals to produce an estimated quantity of delivered fluid.

In one embodiment, a programmed processor executes a plurality of pre-stored instructions which provide for receiving and storing one or more estimated flow rates as well as keeping track of one or more pump operating time intervals. The estimated flow rates can be multiplied by the time intervals during which the respective pump is pumping fluid to produce an estimated quantity of delivered fluid. In yet another aspect of the invention, the circuitry can deliver an additive, for instance, chlorine, to a quantity of delivered fluid based on the estimated flow rate. Hence, the claimed apparatus does not need to be connected to a fluid flow sensor to provide the estimated quantities of delivered fluid.

The pending claims have been rejected as anticipated by Wissenbach et al. We first note that anticipation requires that:

"each and every element is set forth in the claim is found, either expressly or inherently described, in a single prior art reference ... The identical invention must be shown in as complete detail as is contained in the claim ... The elements must be arranged as required by the claim" (MPEP, § 2131.01, page 2100-69).

Wissenbach et al when compared to the pending claims does not comply with the above-standard. Wissenbach et al is a flow meter which receives signals from one or more flow sensors. As stated therein:

"a multi-function fluid flow monitoring apparatus capable of measuring fluid flow-related variables of fluid in a channel on the basis of signals from any one or more of a plurality of different types of flow sensors. Such different types of flow sensors may include, for example, a bubbler-type pressure sensor, a submerged pressure transducer, an ultrasonic transducer, and/or a velocity sensor forming part of an area-velocity sensor system, each of which sensors may be selectively connected to the apparatus as needed to accommodate various monitoring functions." (Wissenbach et al, Abstract).

All of Wissenbach's signals received control functions are carried out, relative to monitoring fluid flow, based on signals received from flow sensors. As noted further in Wissenbach et al:

"The invention provides an apparatus for monitoring at least one flow-related variable of fluid flow in a channel, comprising an integral operating unit provided in a unitary case, the integral operating unit including computer means for controlling the apparatus and input means for receiving detected signals relative to fluid flow in the channel. The input means is selectively connectable to any selected one or more of a plurality of different types of flow-sensing means for producing signals related to the fluid flow in the channel." (Col. 3, line 66-Col. 4, line 7, Wissenbach et al).

Thus, Wissenbach et al teach the use of flow sensors and the processing of outputs from such sensors in connection with carrying out its flow monitoring function. As further noted therein: - - - - -

"A principal feature of the multi-function fluid flow monitoring apparatus of the invention is its ability to calculate fluid flow-related variables on the basis of outputs from any one of a plurality of interchangeable flow sensors. ... The user is thus able to adapt the apparatus for use in a wide variety of different site conditions simply by selecting a type of flow sensor which is suitable for the conditions of a given monitoring site, instead of having to switch to an entirely different flow meter. In the preferred embodiment described below, the apparatus is adapted to measure fluid flow-related variables on the basis of outputs from at least four different types of sensors." (Col. 7, lines 25-39, Wissenbach et al).

Unlike Wissenbach et al, claim 1 includes:

"circuitry for storing a manually settable fluid flow rate parameter ... time interval determination circuitry ... the determination circuitry establishes an indicium corresponding to the respective time interval and wherein the control circuitry combines the stored flow rate parameter with the indicum to establish a quantity of fluid delivered during the interval."

Given the sensor driven inputs to Wissenbach et al, that fluid flow meter does not anticipate claim 1 for the above reasons. Dependent claims add further structure not anticipated by Wissenbach et al. For example, claim 8 includes additionally:

"instructions for carrying out a pre-stored fluid delivery schedule."

Wissenbach et al are completely silent relative to the structure of claim 8 and cannot anticipate same. By way of further example, claim 11 requires:

"instructions for delivery of a selected additive, in accordance with
a pre-defined schedule, to the fluid"

Wissenbach et al are completely silent relative to the structure of claim 11 and cannot anticipate same for the above reasons.

Similar comments apply to pending amended claim 20 and its dependent claims. Wissenbach et al cannot anticipate any of those claims for the above reasons.

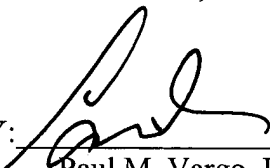
None of the other prior art of record makes up for the deficiencies in Wissenbach. The other prior art patent documents including Hungerford et al, Otten et al and Reams et al all teach the use of flow sensors. Hence, for the above reasons, none of those additional prior documents anticipates and makes obvious the pending claims.

The newly added claims are also allowable over the prior art of record for all of the above reasons. Allowance of the application is respectfully requested.

Respectfully submitted,

WELSH & KATZ, LTD.

BY:



Paul M. Vargo, Reg. No. 29,116

120 South Riverside Plaza
22nd Floor
Chicago, Illinois 60606
Phone: 312-655-1500-401
Fax: 312-655-1501

Marked Version of the Amended Claims

20. (Amended) A self-contained flow meter comprising:
a housing;
energy receiving prongs carried by the housing;
a power supply with an input coupled to the prongs;
circuitry, coupled to the power supply, wherein the circuitry stores [a] an expected
flow rate parameter and at least one flow delivery interval;
circuitry for multiplying the parameter and the interval to establish a quantity of
fluid delivered during the interval; and
a display device for visually presenting the quantity of fluid delivered.

Please amend claim 22 as follows:

22. (Amended) A meter as in [claim20] claim 20 which includes at least one pre-stored
additive supplying sequence.
